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WHAT IS CLAIMED IS:

1. A method of detecting the presence of an analyte, comprising the steps of:

placing a chromogenic or fluorogenic detector reagent for detecting the presence of the analyte on a chromatographic sheet or medium containing sorbent material selected from the group consisting of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, aluminum oxide, and mixtures of therof;

placing the analyte in a solution where the solvent for the analyte consists of a non-aqueous solvent selected from the group of hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane;

placing the solution containing the analyte in a tube having an end portion with a microcapillary sized opening, so that when the tube is placed in contact with a chromatographic sheet having a surface layer formed of sorbent material, the solution

containing the analyte is withdrawn from the end portion of the tube and onto the surface layer of the sorbent material by capillary action;

placing the end portion of the tube having the microcapillary sized opening in contact with the sorbent material at the place where the detector reagent has been deposited on the sorbent material so that the solution containing the analyte is withdrawn from the tube by capillary action, the solvent being absorbed into the sorbent material and the analyte being separated from the solvent and adsorbed by the sorbent material at the place of contact of the end portion of the tube with the sorbent material.

2. A method of screening a solution for an analyte that has been dissolved in a solvent to form a solution and for detecting the presence of the analyte when the solution is deposited in a sorbent material so that the analyte is separated from the solvent at the place of application to the sorbent material, comprising the steps of:

placing a detector reagent for detecting the presence of the analyte on the sorbent material;

placing the solution containing the analyte in a tube having an end portion forming a microcapillary sized opening in the end portion of the tube so that when the tube is placed in contact with the sorbent material, the solution containing the analyte in the tube is withdrawn from the end portion of the tube and into the sorbent material by capillary action;

placing the end portion of the tube forming the microcapillary sized opening in contact with the sorbent material at the location where the detector reagent is placed on the sorbent material, so that the solution is withdrawn from the tube by capillary action,

the solvent being absorbed into the sorbent material and the analyte being separated from the solvent and adsorbed by the sorbent material at the point of contact of the end portion of the tube with the sorbent material for reacting with the detector reagent.

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3. The method of claim 2, wherein the diameter of the microcapillary sized opening has range of diameters of from about 0.05 to about 1.6 millimeters.

4. The method of claim 2, wherein the sorbent material is formed of a polar material selected from the group consisting of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, and aluminum oxide and the solvent for the analyte is a non-aqueous solvent that is less polar than the sorbent material and selected from the group of ethylene dichloride, dichloromethane, ethyl ether, o-dichlorobenzene, chlorobenzene, benzene, o-xylene, m-xylene, p-xylene, methyl tertiary-butyl ether, toluene, carbon tetrachloride, trichloroethylene, n-butyl chloride, hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

5. The method of claim 2, wherein the sorbent material comprises a thin layer chromatographic medium containing a silica gel or polysilicic acid sorbent and the solvent for the analyte is selected from the group consisting of hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexane, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

6. The method of claim 2, wherein the detector reagent is selected from the group of bromcresol green; 7,7,8,8-tetracyanoquinodimethane (TCNQ); gold chloride; gold chloride/NaOH solution; 4-(4'-nitrobenzyl)pyridine/NaOH; cholinesterase/indoxyl acetate; cholinesterase/2,6-dichloroindophenylacetate, sodium pyrophosphate peroxide/aromatic amine; potassium bismuth iodide; 1 ,3-diisonitrosoacetone guanidinium salt; bis(diethylamino)benzophenone oxime; bis(diethylamino)benzophenone; bis(dimethylamino)thiobenzophenone; phenylazoformic acid 2-diphenylhydrazide; diphenylcarbazone; diphenylthiocarbazone; mercuric salt; diethyldithiocarbamic acid silver salt; 2,2'-dithiobis(5-nitropyridine); 5,5'-dithiobis(2-nitrobenzoic acid), Ellman's Reagent; molybdenum oxide in sulfuric acid; ammonium molybdate; iodine/starch; and sulfuric acid (4M); ammonium sulfate; ammonium cerium(IV)sulfate; ammonium iron(II)sulfate; cobalt(II)thiocyanate; palladium(II)chloride; potassium iodide plateate; sodium tetraphenyl boron; o-tolidine; and N-2,6-trichloro-p-benzoquinoneimine.

7. The method of claim 6, wherein the sorbent material is a polar material selected from the group of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, and aluminum oxide, and the solvent for the analyte is selected from solvents that are less polar than the sorbent material and selected from the group consisting of ethylene dichloride, dichloromethane, ethyl ether, o-dichlorobenzene, chlorobenzene, benzene, o-xylene, m-xylene, p-xylene, methyl tertiary-butyl ether, toluene, carbon tetrachloride, trichloroethylene, n-butyl chloride, hexadecane, nonane,

cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

8. The method of claim 2, wherein the sorbent material is a chromatographic material selected from the group consisting of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, and aluminum oxide and mixtures thereof, and the solvent for the analyte is selected from the group consisting of hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

9. The method of claim 2, wherein the sorbent material is formed of a polar chromatographic material and the solvent for the analyte is a non-aqueous solvent that has a lower polarity than the sorbent material.

10. The method of claim 2, wherein the sorbent material is formed of a non-polar material selected from the group of reversed phase silica Gel $C_2$ (dimethyl bonded), reversed phase silica gel $C_2$ (ethyl bonded), reversed phase silica gel $C_8$ (octyl bonded), reversed phase silica gel $C_{18}$ (octadecyl bonded), acetylated cellulose, and the solvent for the analyte is an aqueous solvent mixture containing solvents selected from the from the group of water

11. The method of claim 2, wherein the sorbent material is formed of an ion-exchange material selected from the group of anion exchange resin, cation exchange resin and diethylaminoethylcellulose and the solvent for the analyte comprises water.

12. A kit for screening solutions containing an analyte and for detecting the presence of the analyte when the solutions containing the analyte are deposited in a sorbent material, comprising:

means for obtaining a solution containing the analyte;

tube means for receiving the solution containing the analyte, the tube means having an end portion with a microcapillary sized opening for dispensing the solution containing the analyte by capillary action; and

chromogenic sorbent material having a detector reagent pre-deposited therein for detecting the presence of the analyte, the chromogenic sorbent material receiving the solution containing the analyte from the end portion of the tube means having the microcapillary sized opening as the end portion of the tube means is brought in contact with the sorbent material where the detector reagent has been pre-deposited and the solution containing the analyte is drawn into the sorbent material by capillary action and with the analyte being concentrated at the place of contact of the tube means with the

means for obtaining a solution containing the analyte;

tube means for receiving the solution containing the analyte, the tube means having an end portion with a microcapillary sized opening formed therein for dispensing the solution containing the analyte by capillary action;

sorbent material having a detector reagent for detecting the presence of the analyte pre-deposited in the sorbent material, the sorbent material receiving the solution containing the analyte from the tube means as the end portion of the tube means having the microcapillary sized opening is brought in contact with the sorbent material so the solution containing the analyte is deposited on the sorbent material by capillary action where the detector reagent has been pre-deposited and with the analyte being adsorbed by and concentrated in the sorbent material at the place of contact between the end portion of the tube means with the sorbent material for combining with the detector reagent.

14. The system according to claim 13, wherein the microcapillary sized opening is defined by an end wall of the end portion of the tube means and the thickness of the end wall is at least equal to the diameter of the microcapillary sized opening.

15. The system according to claim 13, wherein the microcapillary sized opening is defined by an end wall of the end portion of the tube means and the thickness of the end wall is at least twice the diameter of the microcapillary sized opening to reinforce the end portion of the tube means and to provide uniform sealing contact between the end wall and the sorbent material when the tube means is placed in contact with the sorbent material

16. The system according to claim 13, wherein the tube means is selected from the group of microcapillary tubes, micropipets and micropipet tips.

17. The system according to claim 13, wherein the diameter of the microcapillary sized opening has a range between about 0.05 to about 1.6 millimeters.

18. The system according to claim 13, wherein the volume of a microcapillary tube or a micropipet is between about 0.1 to about 30 microliters.

19. The system according to claim 13, wherein the sorbent material comprises a thin layer chromatographic sheet provided with a silica gel surface layer.

20. The system according to claim 13, wherein the sorbent material comprises a thin layer chromatographic medium provided with a polysilicic acid sorbent.

21. The system according to claim 20, wherein the detector reagent is selected from the group consisting of bromcresol green; 7,7,8,8-tetracyanoquinodimethane (TCNQ); gold chloride; gold chloride/NaOH solution; 4-(4'-nitrobenzyl)pyridine/NaOH; cholinesterase/indoxyl acetate; cholinesterase/2,6-dichloroindophenyl acetate, sodium pyrophosphate peroxide/aromatic amine; potassium bismuth iodide; 1 ,3-diisonitrosoacetone guanidinium salt; bis(diethylamino)benzophenone oxime; bis(diethylamino)benzophenone; bis(dimethylamino)thiobenzophenone;

phenylazoformic acid 2-diphenylhydrazide; diphenylcarbazone; diphenylthiocarbazone; mercuric salt; diethyldithiocarbamic acid silver salt; 2, 2'-dithiobis(5-nitropyridine); 5,5'-dithiobis(2-nitrobenzoic acid), Ellman's Reagent; molybdenum oxide in sulfuric acid; ammonium molybdate; iodine/starch; and sulfuric acid (4M), ammonium sulfate; ammonium cerium(IV)sulfate; ammonium iron(II)sulfate; cobalt(II)thiocyanate; palladium(II)chloride; potassium iodine plateate; sodium tetraphenyl boron; o-tolidine; and N-2,6-trichloro-p-benzoquinoneimine.

22. The system according to claim 13, wherein the sorbent material is formed of a polar silica gel material and the solvent for the solution containing the analyte is a non-aqueous solvent that has a lower polarity than the sorbent material.

23. The system according to claim 13, wherein the sorbent material is a polar material selected from the group consisting of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, and aluminum oxide and the solvent for the analyte is a non-aqueous solvent that is selected from the group comprising hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

24. The system according to claim 13, wherein the detector reagent comprises a solution in which the detector reagent is dissolved in a polar solvent and deposited on the sorbent material, wherein the sorbent material is a polar material selected from the group of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, and

aluminum oxide and wherein the solvent for the analyte is less polar than the sorbent material and is selected from the group comprising hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

25. The system according to claim 13, wherein the sorbent material is a chromatographic material selected from the group consisting of silica gel, high performance thin layer chromatography (HPTLC) silica gel, polysilicic acid, aluminum oxide, cellulose, polyamide, reversed phase silica Gel $C_2$ (dimethyl bonded), reversed phase silica gel $C_2$ (ethyl bonded), reversed phase silica gel $C_8$ (octyl bonded), reversed phase silica gel $C_{18}$ (octadecyl bonded), acetylated cellulose, silica gel modified with amino groups, silica gel modified with cyano groups, Kieselghur impregnated with hydrocarbons, anionic and cationic anion exchange resins, diethylaminoethyl cellulose, and mixtures of the listed sorbents, and the solvent for the analyte is selected from the group comprising acetic acid, water, aqueous buffer solution with a pH in the range 2-12, dimethylsulfoxide, N-methylpyrrolidone, N,N-dimethyl acetamide, N,N-dimethyl formamide, propylene carbonate, acetonitrile, 2-methoxyethanol, diethylcarbonate, pyridine, methanol, acetone, ethanol, beta-phenethylamine, 2-ethoxyethanol, dioxane, methyl ethyl ketone, methyl n-propyl ketone, methyl acetate, methyl isobutyl ketone, chloroform, tetrahydrofuran, n-propanol, methyl isoamyl ketone, ethyl acetate, 2-methoxyethylacetate, isobutyl alcohol, n-butyl acetate, 2-butanol, 2-propanol, 1-butanol, ethylene dichloride, dichloromethane, ethyl ether, o-dichlorobenzene, chlorobenzene, benzene, o-xylene, m-xylene, p-xylene, methyl tertiary-butyl ether, toluene, carbon tetrachloride, trichloroethylene, n-butyl

chloride, hexadecane, nonane, cyclohexane, trimethylpentane, petroleum ether, iso-hexanes, hexane, heptane, cyclopentane, trichlorotrifluoroethane, and pentane.

26. The method of claim 2, wherein the sorbent material comprises a porous medium formed of two layers, the top layer formed of a sorbent substance and a detector reagent on or within a porous support, and wherein the analyte is deposited in the top layer, and the bottom layer is formed a porous absorbent material containing a compound that dissolves in water to form a solution that wets the top layer, and the compound in aqueous solution reacts with the substance produced due to the reaction or interaction of the analyte with the detector reagent in the top layer, thereby producing a color change, or a change in fluorescence under ultraviolet illumination.

27. The system according to claim 13, wherein the sorbent material comprises a porous medium formed of two layers, the top layer formed of a sorbent substance and a detector reagent on or within a porous support, and wherein the analyte is deposited in the top layer, and the bottom layer is formed a porous absorbent material containing a compound that dissolves in water to form a solution that wets the top layer, and the compound in aqueous solution reacts with the substance produced due to the reaction or interaction of the analyte with the detector reagent in the top layer, thereby producing a color change, or a change in fluorescence under ultraviolet illumination.